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25 January 1963

MEMORANDUM FOR: Director of Security

SUBJECT   : SRD Index System Proposal

    1. Last February we agreed to continue mutual exploration of EDP potential in the Office of Security. Accordingly, a team composed of Messrs. [   ] and [   ] has been actively at work; they have received technical help from Mr. [   ] and guidance from Mr. [   ] ADPS.
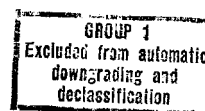
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    2. Attached hereto is an initial report of Phase II, EDP Study for the Office of Security. In it you will find details of the SRD Index System briefing presented to you and your staff on 19 October 1962. The heart of this report is the recommendation that the present 3 x 5 index cards be converted to IBM punched cards. Implementation of any future automatic data processing program will hinge on having the basic data in machine language. Conversion to punched cards, therefore, represents an essential first step in this process. No specific recommendation for a computer system is made at this time. However, as our experience and readiness grows we anticipate moving in this direction.

    3. My recommendations are, therefore, limited to work which needs to be done during the next 12 months in order to convert the index to a punched card file. This work may be categorized as follows:

        a. <u>Finalize the design of an IBM index card.</u> The card example included in the report is a draft suggestion based on an analysis of the kinds of data currently being recorded in the manual index.

GROUP 1
Excluded from automatic
downgrading and
declassification

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Precise specifications need to be determined for:

1) data items necessary in the index card,

2) number of card columns required for each data item,

3) most desirable arrangement for printing data at top of card,

4) editing procedures,

5) standard abbreviations or codes,

6) key punch and verification instructions.

During the resolution of the above details, provision will be made for compatibility insofar as practicable with the computer system of DDP/RI. Pending Office of Security proposals to adopt a new all numerical file numbering system for OS should also be resolved concurrently.

b. <u>Perform a pilot operation to convert a portion of the present index to punched cards.</u>
The conversion of the total index file to punched cards will be a major undertaking. A pilot operation involving approximately 15,000 cards, is required in advance of this major effort in order to prove the suitability of the card design and the associated conversion procedures. This pilot operation can be accomplished with present OS and ADPS personnel and equipment.

c. <u>Upon satisfactory completion of the pilot operation, convert the entire index to punched cards.</u>
As indicated above, this is a large effort which we will try to complete within nine months after the end of the pilot operation. Editing the manual index cards in preparation for key punching will require 12 editors. Card punching and verifying operations will require approximately 18 key punch

operators. A special group of personnel should be
established for the duration of the conversion
project to handle editing and card punching functions.

    d. <u>Utilizing existing Agency computers, continue
system development efforts by preparing and testing
pilot programs.</u>
Punched cards will provide an opportunity for some
automatic processing by means of conventional
punched card processing equipment. For example:

    1) Additions to the file may be sorted into
alphabetic sequence for filing purposes.

    2) Statistical analyses of the additions
may be prepared by overt or covert classification,
subject or reference type, and any other classifying
data that is contained in the punched card.

    3) The main index file may be sequence
checked on a cyclical basis to correct manual
filing errors.

    4) The index may be listed to permit auditing
or review of indexed data.

However, the most important aspect of implementing
these processes is the useful experience that will
be gained by OS and ADPS personnel in the establish-
ment of more sophisticated computer processing
systems. ADPS will be utilizing existing Agency
computers during the file conversion period to
develop and test the necessary programs for such
systems.

    4. The attached report shows an estimated cost of
$92,000 for converting the present index to punched cards.
Approximately $8,000 would be for machine rentals and
$84,000 for personnel. In addition, there would be
supply costs of approximately $7,000 for file trays and
cards. You will recall that in our discussion with the
DD/S last year, it was agreed that ADPS would budget for

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the spade-work. Accordingly, we are prepared to assume
costs of equipment and supplies ($15,000) and also to
allocate up to $75,000 for personnel costs.

   5. I am convinced that the program as recommended
is a sound and logical one for the Office of Security.
Your concurrence and endorsement are requested. I
hope you will:

      a. Concur in the concept of the basic program
   as outlined above and in the attached report.

      b. Support the one-year conversion and computer
   development efforts.

      c. Endorse continued ADP Staff efforts to
   extend the use of automatic data processing techniques
   in OS.

   6. If you concur in this paper, I plan to see the
DD/S for his general approval, and for his assistance
in resolving implementation problems re people, budget,
and space.

                        Joseph Becker
                          Chief,
                CIA Automatic Data Processing Staff

Attachment: SRD Index System

CONCURRENCE: (Signed) Sheffield Edwards   3 1 JAN 1963
              _____   _____
                 Sheffield Edwards   Date
                 Director of Security

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